CLAIMS

What is claimed is:

- 1. A coating composition comprising a film forming binder of
- a. a modified polyepoxy resin comprising the reaction 5 product of a polyepoxide resin, dimer fatty acids and an organic polyisocyanate, wherein the modified polyepoxy resin has a weight average molecular weight of 1000 to 50,000; and
 - b. at least one amino functional silane crosslinking agent.
- 10 2. The coating composition of claim 1 containing up to 70% by weight of solvent.
 - 3. The coating composition of claim 2 wherein the polyepoxide resin is a polyepoxy hydroxy ether resin having an expoxy equivalent weight average weight of at least 180.
 - 4. The coating composition of claim 2 wherein the dimer fatty acids comprise dimerized unsaturated higher fatty acids having 4-22 carbon atoms.

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5. The coating composition of claim 4 wherein the unsaturated higher fatty acids are selected from the group consisting of unsaturated fatty acids from safflor oil, soybean oil, linseed oil, tall oil and mixtures thereof.

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6. The coating composition of claim 2 wherein the polyisocyanate is selected from the group consisting of aliphatic polyisocyanates, cycloaliphatic polyisocyanates and aromatic polyisocyanates.

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7. The coating composition of claim 6 in which the polyisocyanate consists of isophorone diisocyanate.

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8. The coating composition of claim 2 wherein the aminofunctional silane has the formula

 $(X_n R)_a Si-(-OSi)_v-(OR^1)_b$

wherein X is selected from the group consisting of $-NH_2$, $-NHR^2$, and SH, n is an integer from 1-5, R is a hydrocarbon group contain 1 - 22 carbon atoms, R¹ is an alkyl group containing 1-8 carbon atoms, a is at least 1, y is from 0-20, b is at least 2 and R² is an alkyl group having 1-4 carbon atoms.

- 9. The coating composition of claim 8 wherein the
 aminofunctional silane is selected from the group consisting of N-beta(aminoethyl)–gamma-aminopropyl trimethoxy silane and diethylene triamino propylaminotrimethoxy silane.
- The coating composition of claim 8 containing an at least
 one additional amino functional compound selected from the group consisting of primary amines, secondary amines and tertiary amines.
 - 11. The coating composition of claim 2 containing pigments in a pigment to binder weight ratio of 1/100 to 300/100.

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12. The coating composition of claim 11 wherein the pigments are selected from the group consisting of titanium dioxide, iron oxide, silica, carbon black, baryte, zinc oxide, aluminum silicate, barium sulfate, zinc phosphate, lead silicate, clay and any mixtures thereof.

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13. The coating composition of claim 1 comprising 30 to 70 % by weight organic solvent and pigments in a pigment to binder weight ratio of 50/100 to 200/100;

wherein polyepoxide resin is a polyepoxy hydroxy ether resin having an epoxy equivalent weight of at least 180;

the dimer fatty acids comprise dimerized unsaturated higher fatty acids having 4-22 carbon atoms;

the polyisocyanate is selected from the group consisting of aliphatic diisocyanate, cycloaliphatic diisocyanates and aromatic diisocyanates;

the aminofunctional silane has the formula

$$(X_n R)_a Si-(-OSi)_y-(OR^1)_b$$

- wherein X is selected from the group consisting of –NH₂, -NHR², and SH, n is an integer from 1-5, R is a hydrocarbon group contain 1 22 carbon atoms, R¹is an alkyl group containing 1-8 carbon atoms, a is at least 1, y is from 0-20, b is at least 2 and R² is an alkyl group having 1-4 carbon atoms and
- contains an at least on additional amino functional compound selected from the group consisting of primary amines, secondary amines and tertiary amines.
- 14. A coated substrate which comprises a substrate coated with a layer of the coating composition of claim 1.
 - 15. The coated substrate of claim 14 wherein the substrate is aluminum.
- 20 16. The coated substrate of claim 15 comprising a top coating selected from the group consisting of a clear coat/pigmented base coat and a pigmented topcoat.
 - A two component coating composition comprising
- Component A a modified polyepoxy resin comprising the reaction product of a polyepoxide resin, dimer fatty acids and an organic polyisocyanate, wherein the modified polyepoxy resin has a weight average molecular weight of 1000 to 50,000; and
- Component B at least one amino functional silane crosslinking agent;

wherein Components A and B are thoroughly mixed together before application to a substrate.